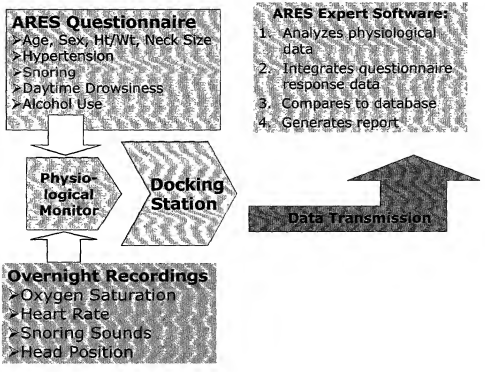

ARES Questionnaire
➢Age, Sex, Ht/Wt, Neck Size
➢Hypertension
➢Snoring
➢Daytime Drowsiness
➢Alcohol Use
ARES Expert Software:
1. Analyzes physiological data
2. Integrates questionnaire response data
3. Compares to database
4. Generates report
Physio-logical Monitor
Docking Station
Data Transmission
Overnight Recordings
➢Oxygen Saturation
➢Heart Rate
➢Snoring Sounds
➢Head Position

Figure 1.

Applicant: ADES MEDICAL INC. et al.
9 Sheets of Drawings with 16 Figs.
Filing Date: 28 December 2001
Earliest Priority Date: 29 December 2000
DOCKET NO: 38461-6098
Sheet 2 of 9
SLEEP APNEA RISK EVALUATION

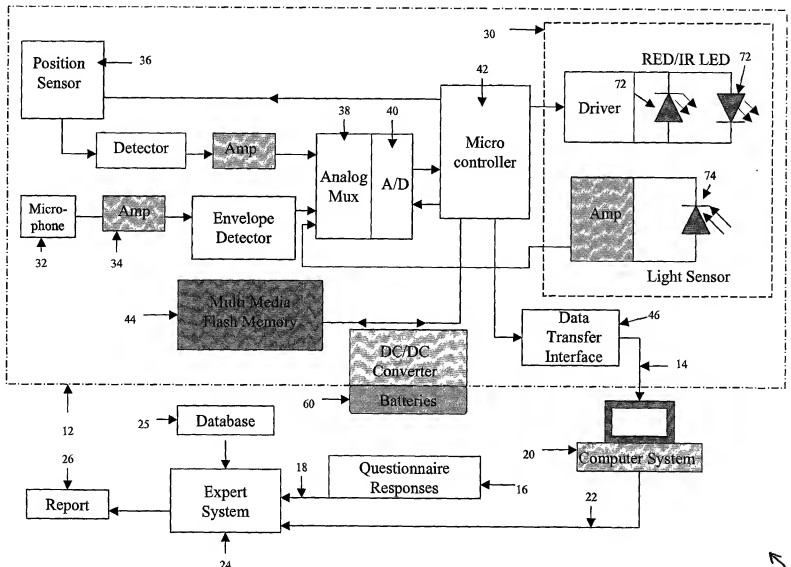


Figure 2.

Applicant: ARES MEDICAL, INC., et al.
System and Method for Diagnosing Sleep Apnea
Filing Date: 28 December 2001
Earliest Priority Date: 29 December 2000
DOCKET NO. 38461-6098
Sheet 3 of 9
SLEEP APNEA RISK EVALUATION

Figure 4

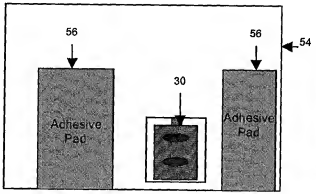
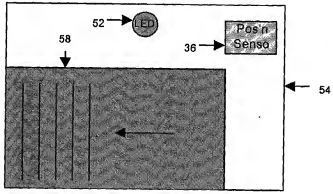


Figure 3



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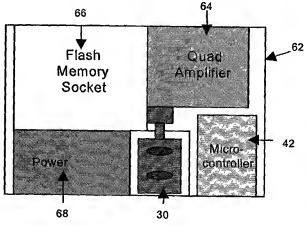

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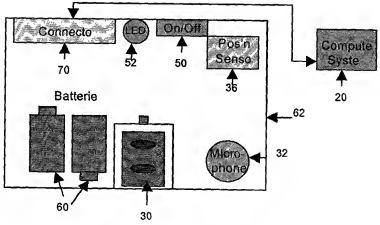

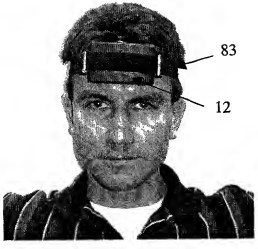

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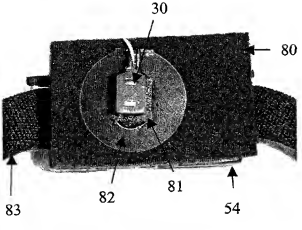

Figure 8.

Figure 9

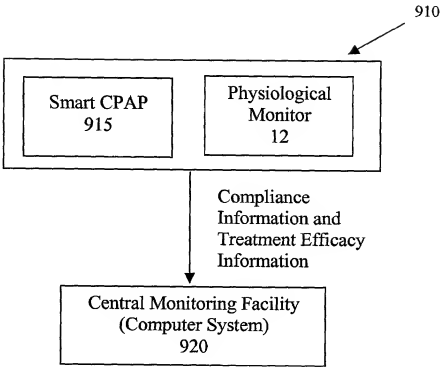

Figure 10

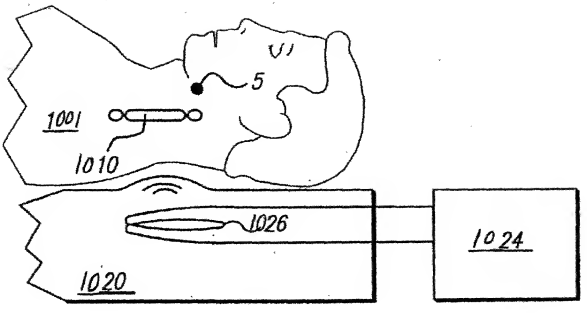

Figure 11

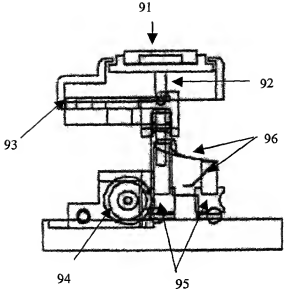

Figure 12. Illustration of SpO2 active pressure device.

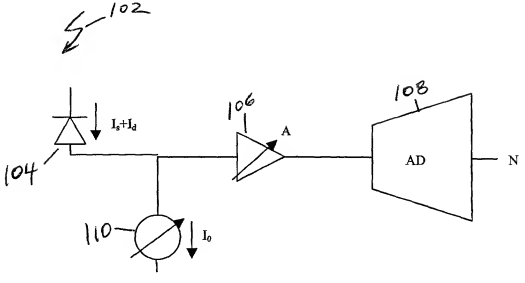

Figure 13. Diagram of SpO2 Measuring Circuit

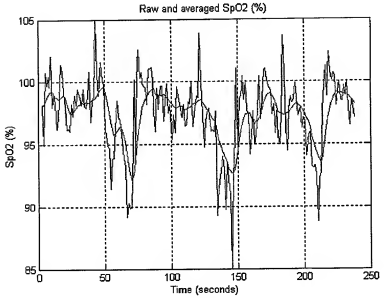

Figure 14. Illustration of the raw SpO2 signal and after application of the three level smoothing algorithm.

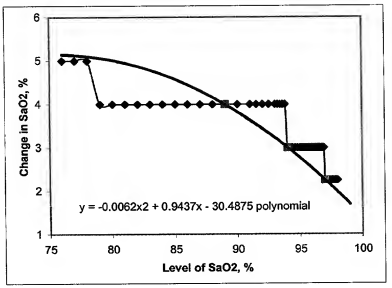

Figure 15: Curve of the regression line for calculating required magnitude of desaturation based on the stepped approach.

Figure 16. Physiological monitor in alternative embodiment with airflow sensor.